(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 4 August 2005 (04.08.2005)

PCT

(10) International Publication Number WO 2005/071608 A1

(51) International Patent Classification7: G06K 19/077, 19/07, G09F 3/00, H01L 27/12, B42D 15/10

(21) International Application Number:

PCT/JP2005/001037

(22) International Filing Date: 20 January 2005 (20.01.2005)

(25) Filing Language:

(26) Publication Language:

English

(30) Priority Data: 2004-015449

23 January 2004 (23.01.2004)

(71) Applicant (for all designated States except US): SEMI-CONDUCTOR ENERGY LABORATORY CO., LTD. [JP/JP]; 398, Hase, Atsugi-shi, Kanagawa, 2430036 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ARAI, Yasuyuki [JP/JP]; c/o SEMICONDUCTOR ENERGY LABORA-TORY CO., LTD., 398, Hase, Atsugi-shi, Kanagawa,

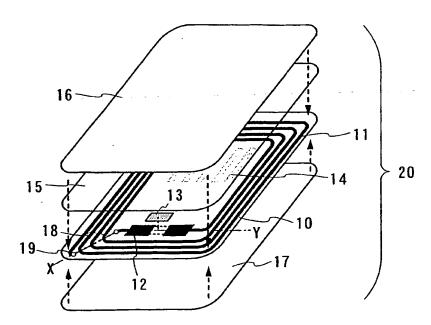
2430036 (JP). AKIBA, Mai [JP/JP]; c/o SEMICONDUC-TOR ENERGY LABORATORY CO., LTD., 398, Hase, Atsugi-shi, Kanagawa, 2430036 (JP). TACHIMURA, Yuko [JP/JP]; c/o SEMICONDUCTOR ENERGY LAB-ORATORY CO., LTD., 398, Hase, Atsugi-shi, Kanagawa, 2430036 (JP). KANNO, Yohei [JP/JP]; c/o SEMICON-DUCTOR ENERGY LABORATORY CO., LTD., 398, Hase, Atsugi-shi, Kanagawa, 2430036 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN. CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FL GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: ID LABEL, ID CARD, AND ID TAG



(57) Abstract: As a non-contact ID label, ID tag and the like being widespread, it is required to manufacture a considerable quantity of ID labels at quite a low cost. An ID label attached to a product is, for example, required to be manufactured at 1 to several years each, or preferably less than one yen. Thus, such a structure and a process are demanded that an ID label can be manufactured in a large quantity at a low cost. A thin film integrated circuit device included in the ID label, the ID card, and the ID tag of the invention each includes a thin film active element such as a thin film transistor (TFT). Therefore, by peeling a substrate on which TFTs are formed for separating elements, the ID label and the like can be manufactured in a large quantity at a low cost.

ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, HE, IS, FT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BE, BJ, CE, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report